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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,423	02/04/2004	Mike Soumokil	07781.0140-00	1939
60668 7590 05/05/2009 SAP / FINNEGAN, HENDERSON LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413				
EXAMINER				
SAEED, USMAAN				
ART UNIT		PAPER NUMBER		
2166				
MAIL DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/770,423

Applicant(s)

SOUAMOKIL ET AL.

Examiner

USMAAN SAEED

Art Unit

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1.5-8,10,12-14,16,18-20,22,24,25,28 and 29 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.

- 6) ☒ Claim(s) 1.5-8,10,12-14,16,18-20,22,24,25,28 and 29 is/are rejected.

- 7) ☐ Claim(s) _____ is/are objected to.

- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-846)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/25/2009 has been entered.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 8, 10, and 12-13 are rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter. The language of the claims raises a question as to whether the claims are directed merely to an environment or machine which would result in a practical application producing a concrete useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

Claims 8, 10, and 12-13 are rejected because the method claims do not qualify as a statutory process. These claims are not statutory because a process must be tied to another statutory class. Thus to qualify as a statutory process, the claims should positively recite the other statutory class to which it is tied, for example by identifying the apparatus that accomplished the method steps.

To expedite a complete examination of the instant application the claims rejected under U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of application amending these claims to place them within the four categories of invention.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 5-8, 10, 12-14, 16, 18-20, 22, 24-25 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ludwig et al.** (**Ludwig** hereinafter) (U.S. PG

Pub No. 2003/0004874) in view of **Suzuki et al. (Suzuki hereinafter)** (U. S. PG Pub No. 2002/0032692).

With respect to claim 1, **Ludwig** teaches **“a computer readable storage medium for storing an electronic data record, of an invoice, the electronic data record comprising”** as the system may allow data to be entered for the following exemplary fields, which the system may be adapted to store as global information on the database: name, address, city, state, zip, country, phone, number, fax number, and maximum invoice amount allowed. The system may use the maximum invoice amount allowed field to establish a threshold for a maximum payment for a single invoice (**Ludwig** Paragraph 0075).

“a data field including an identification of a current state of the processing of the invoice wherein the current state is assigned by a user through a dialogue displayed on a display device” as “Paid Through Another Source” may be provided by the system as an option for the biller system user to mark an invoice as closed by selecting desired invoices and clicking on the “Paid through another source” button. Once this occurs, the system may, for the invoices in question, update their audit trail to reflect that they were paid outside the system, and then change their status to closed (**Ludwig** Paragraph 0091 & 0130). Therefore the user is entering the current state “closed” by clicking on the button. Therefore the identification of the current invoice is that it is paid and closed.

Further Ludwig teaches the filter area, the system may provide the following exemplary choices: by date (past due, eligible for discount, due within xxx days); and by status (paid invoices, adjusted invoices, unpaid invoices, paid through another source); and by payer (all payer, specific payer); and by attribute range between xxx and yyy (none, invoice numbers, store/location, purchase orders, purchase request number, invoice issue dates, dollar amount, bill of lading numbers, receiving location zipcodes, invoice aging) (Ludwig Paragraph 0080). These lines also teach the identification of the current state of the processing of the invoice.

“the data field is used for starting a workflow which depends on the current state” as (Ludwig Figures 6a-6c and 9a-9b). Figures 9a-9b teach a state dependent workflow for the payment of an invoice. Figure 7c teaches a state dependent workflow for adjustment of invoices.

In figures 9a and 9b, the workflow for the payment is being initiated which is being dependent on the current state of the invoice, which is that the invoice is pending or due.

“the data field has links to the tables” as the system may link the status field to the invoice history page, at which the system may display a full status history for the selected invoice. By default, the system may display the following exemplary columns: payer name, invoice number, due date, status, net amount due, amount to pay, P.O. number, P.O. requisition number, store number, and select (Ludwig Paragraph 0092). Therefore, these lines teach that the status field is being linked to the history page which contains the current status of an invoice.

“a plurality of states of the processing of the invoice” as the perspective of the payer system user, the system may identify an invoice as having one of the following exemplary states: presented, viewed (an invoice may be considered “viewed” when a invoice display query is built with the invoice included; the user does not necessarily need to actually see the invoice to have it considered viewed), verified (an invoice that is in this state may be rolled back to viewed given the user has the permission to verify), payment initiated, payment authorized, payment pending (an invoice in this state may be rolled back to verified given the user has the permission to authorize payment), paid, and closed (**Ludwig Paragraph 0127**).

Ludwig teaches the elements of claim 1 as noted above but does not explicitly disclose, **“a first link to a description table comprising identifications of a plurality of states of the processing of the invoice and corresponding descriptions of the plurality of states, and a second link to an instruction table comprising the identifications of the plurality of states and corresponding instructions automatically executable by a computer.”**

However, **Suzuki** discloses, **“a first link to a description table comprising identifications of a plurality of states of the processing of the invoice and corresponding descriptions of the plurality of states”** as (**Suzuki Paragraphs 0065, 0071, 0147, and 0183**).

“a second link to an instruction table comprising the identifications of the plurality of states and corresponding instructions automatically executable by a computer” as (**Suzuki Paragraphs 0019-0020, 0064, 0073, 0145 and 0150**).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because **Suzuki's** teaching would have allowed **Ludwig** to provide a more flexible workflow management system by storing process definitions such as possible states and transitions and by calling and executing API's provided by the workflow management program.

With respect to claim 5, **Ludwig** teaches **“wherein the data field has a third link to an event table comprising the identification of the plurality of states and corresponding events which can occur during the processing of the invoice”** as (**Ludwig** Paragraph 0104).

With respect to claim 6, **Ludwig** teaches **“wherein the electronic data record is at least partially accessible via the Internet and wherein the content of the data field for the current state or a data field for comments is editable via the Internet”** as the system may permit information to be maintained and edited at this page, which the system may store as global information on the database (**Ludwig** Paragraph 0064). The present invention may be appropriately adapted to include such communication functionality and Internet browsing ability (**Ludwig** Paragraph 0157).

With respect to claim 7, **Ludwig** does not explicitly teaches **“wherein the data field has a link to a proposal table comprising the identification of the plurality of states and corresponding proposals for changing the current state.”**

However, **Suzuki** discloses, **“wherein the data field has a link to a proposal table comprising the identification of the plurality of states and corresponding proposals for changing the current state”** as (**Suzuki** Paragraphs 0065, 0152).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because **Suzuki's** teaching would have allowed **Ludwig** to provide a more flexible workflow management system by storing process definitions such as possible states and transitions and by calling and executing API's provided by the workflow management program.

With respect to claim 8, **Ludwig** teaches **“a method for processing an electronic data record of an invoice, the electronic data record”** as the system may allow data to be entered for the following exemplary fields, which the system may be adapted to store as global information on the database: name, address, city, state, zip, country, phone, number, fax number, and maximum invoice amount allowed. The system may use the maximum invoice amount allowed field to establish a threshold for a maximum payment for a single invoice (**Ludwig** Paragraph 0075) **“comprising a data field including an identification of a current state of the processing of the invoice, the method comprising”** as "Paid Through Another Source" may be provided by the system as an option for the biller system user to mark an invoice as closed by selecting desired invoices and clicking on the "Paid through another source" button. Once this occurs, the system may, for the invoices in question, update their audit trail to reflect that they were paid outside the system, and then change their status to closed

(**Ludwig** Paragraph 0091 & 0130). Therefore the user is entering the state "closed" by clicking on the button. Therefore the identification of the current invoice is that it is paid and closed.

Further, **Ludwig** teaches the filter area, the system may provide the following exemplary choices: by date (past due, eligible for discount, due within xxx days); and by status (paid invoices, adjusted invoices, unpaid invoices, paid through another source); and by payer (all payer, specific payer); and by attribute range between xxx and yyy (none, invoice numbers, store/location, purchase orders, purchase request number, invoice issue dates, dollar amount, bill of lading numbers, receiving location zipcodes, invoice aging) (**Ludwig** Paragraph 0080). These lines also teach the identification of the current state of the processing of the invoice.

"displaying a dialogue on a display device for enabling the current state to be entered by a user and assigning the current state entered by the user to the data field" as "Paid Through Another Source" may be provided by the system as an option for the biller system user to mark an invoice as closed by selecting desired invoices and clicking on the "Paid through another source" button. Once this occurs, the system may, for the invoices in question, update their audit trail to reflect that they were paid outside the system, and then change their status to closed (**Ludwig** Paragraph 0091 & 0130). Therefore the user is entering the state "closed" by clicking on the button. Therefore the identification of the current invoice is that it is paid and closed.

“the data field has links to the tables” as the system may link the status field to the invoice history page, at which the system may display a full status history for the selected invoice. By default, the system may display the following exemplary columns: payer name, invoice number, due date, status, net amount due, amount to pay, P.O. number, P.O. requisition number, store number, and select (**Ludwig Paragraph 0092**). Therefore, these lines teach that the status field is being linked to the history page which contains the current status of an invoice.

“a plurality of states of the processing of the invoice” as the perspective of the payer system user, the system may identify an invoice as having one of the following exemplary states: presented, viewed (an invoice may be considered "viewed" when a invoice display query is built with the invoice included; the user does not necessarily need to actually see the invoice to have it considered viewed), verified (an invoice that is in this state may be rolled back to viewed given the user has the permission to verify), payment initiated, payment authorized, payment pending (an invoice in this state may be rolled back to verified given the user has the permission to authorize payment), paid, and closed (**Ludwig Paragraph 0127**).

“starting a workflow which depends on the current state” as figures 6a-6c (**Ludwig Figures 6a-6c**). Figures 9a-9b teach a state dependent workflow for the payment of an invoice. Figure 7c teaches a state dependent workflow for adjustment of invoices.

In figures 9a and 9b, the workflow for the payment is being initiated which is being dependent on the current state of the invoice, which is that the invoice is pending or due.

Ludwig teaches the elements of claim 8 as noted above but does not explicitly disclose, **“a first link to a description table comprising identifications of a plurality of states of the processing of the invoice and corresponding descriptions of the plurality of states, and a second link to an instruction table comprising the identifications of the plurality of states and corresponding instructions automatically executable by a computer.”**

However, **Suzuki** discloses, **“a first link to a description table comprising identifications of a plurality of states of the processing of the invoice and corresponding descriptions of the plurality of states”** as (**Suzuki** Paragraphs 0065, 0071, 0147, and 0183).

“a second link to an instruction table comprising the identifications of the plurality of states and corresponding instructions automatically executable by a computer” as (**Suzuki** Paragraphs 0019-0020, 0064, 0073 and 0145).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of the cited references because **Suzuki's** teaching would have allowed **Ludwig** to provide a more flexible workflow management system by storing process definitions such as possible states and transitions and by calling and executing API's provided by the workflow management program.

With respect to claim 10, **Ludwig** teaches “**the method of claim 8, further comprising: performing at least one of selecting, sorting, evaluating, and analyzing the electronic invoice according to the current state**” as the system may provide a sort area to allow returned results to be sorted in ascending or descending order according to the following exemplary criteria: due date, invoice number, invoice date, purchase order number, net amount due, store or location number, and invoice aging (**Ludwig** Paragraph 0080).

With respect to claim 12, **Ludwig** teaches “**wherein the current state is selectable by the user according to predefinable events**” as in this section, the system may permit biller system users to be associated with specific system events, which associations the system may be adapted to store as global information on the database. Any time one of these specific events occurs, the system may generate an automatic e-mail and send it to the selected list of biller system users. For example, exemplary distribution list choices may include: invoices loaded successfully, invoices loaded unsuccessfully, invoice adjusted, payment authorized, payment canceled, payment completed, and payment notification (**Ludwig** Paragraph 0104). The system may only permit invoices with the status of “paid”, “presented”, or “viewed” to be closed. All other invoice states may indicate payer workflow is in progress, and the system may not permit invoices having such states to be closed (**Ludwig** Paragraph 0105).

The system may permit a biller system user to select an option 605 to display invoices based on selected criteria and/or specify general search criteria for listing

invoices. Depending on the selection, the system may direct the user to a "view options" page 606 for filtering and sorting (**Ludwig** Paragraph 0080).

With respect to claim 13, **Ludwig** teaches **"the method of claim 8, wherein the method is for use in business software, particularly in an enterprise resource planning software"** as the business service provider system 16 may be an exchange or other service bureau application providing a plurality of business processing services to its clients (which may include the biller system 12 and/or payer system 14). One such business processing service may be electronic bill presentment and payment, as may be provided using a system and/or method consistent with the invention (**Ludwig** Paragraph 0027).

Group of claims 14, 16, 18-19 and 20, 22, 24-25 are essentially the same as group of claims 8, 10, and 12-13 except they set forth the claimed invention as system and a computer-readable medium comprising instructions and are rejected for the same reasons as applied hereinabove.

With respect to claim 28, **Ludwig** teaches **"an electronic data structure for an electronic data record according to any one of claims 1 and 3-7"** as the exemplary embodiments of the system of the present invention described herein may be embodied as one or more distributed computer program processes, data structures (**Ludwig** Paragraph 0156).

Claim 29 is essentially the same as claim 13 except it sets forth the claimed invention as an electronic data structure and is rejected for the same reason as applied hereinabove.

Response to Arguments

4. Applicant's arguments filed on 2/25/2009 have been considered but are moot in view of the new ground(s) of rejection.

In these arguments applicant relies on the amended claims and not the original ones.

Examiner has withdrawn the previously cited Falk et al. and Haseltine et al. references and has combined a new reference Suzuki et al.

Ludwig teaches plurality of links but does not teaches the tables as defined in the claim. However paragraphs of Suzuki et al teach a state definition table identifying plurality of states having state names and description names. Examiner interprets the state names as being plurality of states and definition name as being the description of the state. Further the workflow management program 140 provides the workflow application 150 with API's for manipulating the states of process instances. The program 140 comprises a state transition request table. Examiner interprets this table as comprising instructions to call process program for state transition.

Therefore the combination of teachings taught by Ludwig and teachings taught by Suzuki teach the invention as a whole.

Claims must be given the broadest reasonable interpretation during examination and limitations appearing in the specification but not recited in the claim are not read into the claim (See M.P.E.P. 2111 [R-I]).

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to USMAAN SAEED whose telephone number is (571)272-4046. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571)272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Usmaan Saeed/
Examiner, Art Unit 2166

Usmaan Saeed
Patent Examiner

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/Hosain T Alam/

Supervisory Patent Examiner, Art Unit 2166